

## BIOGRAPHICAL SKETCH

**NAME:** Jerry W. Highfill

**POSITION TITLE:** Biostatistician

### EDUCATION/TRAINING

Institution	Degree	Year	Field of Study
Southwestern College, KS	B.S.	1967	Mathematics and Education
Kansas State University, KS	M.S.	1966-8	Statistics
Colorado State University, CO		1970-2	Mathematical Statistics

### PROFESSIONAL EXPERIENCE:

1968-1970 Biostatistician, Heart Disease & Stroke Control Program, USPHS Commission Corps.  
1972-1980 General Statistician and Functional Area Manager for Statistics, U.S. Army Medical Environmental Engineering Research Unit and U.S. Army Bioengineering R&D Lab.  
1978-1980 Assistant Professor in Statistics, Frederick Community College, Frederick, Maryland.  
1980- Biostatistician, National Health and Environmental Effects Research Laboratory (NHEERL), USEPA.

### PROFESSIONAL SOCIETIES:

1967-2000 American Statistical Association

### SELECTED AWARDS AND HONORS:

2002 U.S. E.P.A. Special Commemorative Award for September 11 Activities, ORD World Trade Center Particulate Matter Toxicological Assessment Team.

### INVITED LECTURES/SYMPOSIA (selected):

Lectures to UNC statistics graduate students. Recent topics included 1) reasons for using fractional factorial designs in tests for engine emissions and 2) using personally developed graphic techniques to display changes in core temperature and heart rate in animals that were continuously monitored during particle exposures.

### ASSISTANCE/LEADERSHIP PROVIDED TO THE SCIENTIFIC COMMUNITY:

Bring statistical design and statistical methodical expertise in the evaluation of scientific publications.

### ASSISTANCE/LEADERSHIP PROVIDED TO THE AGENCY:

Served as a statistical specialist for a special ORD wide quality assurance team for the National Exposure Research Laboratory (NERL). Served on a special Awards Committee and a Career Development Team.

### RECENT PUBLICATIONS(Selected from Jan. 1, 1998 to present, out of a total of 61 publications);

1. Watkinson, W.P., M.J. Campen, K.L. Dreher, W-Y. Su, U.P. Kodavanti, J.W. Highfill, and D.L. Costa. Cardiovascular effects following exposure to particulate matter in healthy and cardiopulmonary-compromised rats. Proceedings of Seventh International Inhalation Symposium, Hannover, Germany, 1999.
2. Watkinson, W.P., M.J. Campen, K.L. Dreher, D.W. Winsett, U.P. Kodavanti, M.C. Jackson, and J.W. Highfill. Effects of exposure to metallic constituents of residual oil fly ash particles in healthy and cardiopulmonary-compromised rats. Am. J. Respir. Crit. Care Med. 159:A, 1999.
3. Watkinson, W.P., M.J. Campen, K.L. Dreher, W-Y. Su, U.P. Kodavanti, J.W. Highfill, and D.L. Costa. Thermoregulatory effects following exposure to particulate matter in healthy and cardiopulmonary-compromised rats. (Seville 1999)
4. Watkinson, W.P., M.J. Campen, K.L. Dreher, D.W. Winsett, U.P. Kodavanti, M.C. Jackson, and J.W. Highfill. Effects of exposure to individual metallic constituents of residual oil fly ash particles in healthy and cardiopulmonary-compromised rats. NHEERL Open House, Nov. 1998.

5. Kampen, M.J., J.P. Nolan, D.L. Costa, K.L. Dreher, D.W. Winsett, U.P. Kodavanti, M.C. Joackson, J.W. Highfill, and W.P. Watkinson. Cardiopulmonary and thermoregulatory effects of exposure to metallic constituents of residual oil fly ash particulates in healthy and compromised rats. Third Colloquium on Particulate Matter and Human Exposure, (Chapel Hill, N.C. 1999.)
6. Watkinson, W.P., M.J. Campen, J.P. Nolan, U.P. Kodavanti, M.C.J. Schadweiler, P.A. Evansky, J.W. Highfill, and D.L. Costa. Effects of inhaled metal constituents of particulate matter air pollution on cardiopulmonary and thermoregulatory parameters in healthy and monocrotaline-treated rats. ALA/ATS International Conference, (Toronto, Ontario, Canada)
7. Watkinson, W.P., M.J. Campen, J.P. Nolan, U.P. Kodavanti, K.L. Dreher, W.-Y. Su, J.W. Highfill, and D.L. Costa. Cardiovascular effects following exposure to particulate matter in healthy and cardiopulmonary-compromised rats. In: Relationships between Acute and Chronic Effects of Air Pollution. (U Heinrich and U Mohr, eds.). pp. 447-463, ILSI Press, Washington, 2000.
8. Watkinson, W. P., M. J. Campen, J. P. Nolan, U. P. Kodavanti, K. L. Dreher, W.-Y. Su, J. W. Highfill and D. L. Costa: Thermoregulatory Effects Following Exposure to Particulate Matter in Healthy and Cardiopulmonary-Compromised Rats. J. Therm. Biol. 25: 131-137, 2000.
9. Gavett, S. H., N. Haykal-Coates, J. W. Highfill, A. D. Ledbetter, L. C. Chen, M. D. Cohen, J. R. Harkema, J. G. Wagner, and D. L. Costa. World Trade Center fine particulate matter causes respiratory tract hyperresponsiveness in mice. Environ. Health Perspect. [Online 20 November 2002, in print June 2003].
10. Gavett, S. H., N. Haykal-Coates, J. K. McGee, J. W. Highfill, A. D. Ledbetter, and D. L. Costa. Toxicological effects of fine particulate matter derived from the destruction of the World Trade Center. EPA/600/R-02/028, Cincinnati, OH. 53 pages, Dec. 2002. (Peer reviewed EPA Report). Available: [http://www.epa.gov/nheerl/wtc/WTC\\_report\\_7b3i.pdf](http://www.epa.gov/nheerl/wtc/WTC_report_7b3i.pdf)
11. Gavett, S. H., N. Haykal-Coates, J. K. McGee, J. W. Highfill, A. D. Ledbetter, L. C. Chen, M. D. Cohen, and D. L. Costa. Toxicological effects of particulate matter derived from the destruction of the World Trade Center on the respiratory tract of mice. EPA Science Forum, p. 51, 2002.